Preferred Optimus trigger signals (for analog generator signals only)

signal mnemonic	signal name	signal measuring point(s)	value range of signal	procedure / transition	trigger signal(s) [slope] **neg**ative or **pos**itive {delay /divisions}	trigger signal measuring point(s)	value of trigger signal **bold** = active status
AV_HT_AN	high tension actual value anode side	EZ130 X4	0V...+3.75V = 0...+75kV	exposure / fluoro command	CTRL_X_C/ [neg] {-1}	EZX 74	+5V / **0V**
AV_HT_CA	high tension actual value cathode side	EZ130 X5	0V...+3.75V = 0...-75kV	exposure / fluoro command	CTRL_X_C/ [neg] {-1}	EZX 74	+5V / **0V**
AV_HT	high tension actual value	EZ130 X3	0...+7.5V = 0...150kV	exposure / fluoro command	CTRL_X_C/ [neg] {-1}	EZX 74	+5V / **0V**
CU_U	stator current phase U dual speed RoCo	EY100 X15 4512 108 09743	9.3A / V additional DC offset of +2.5V	preparation fluoro from 0 rpm braking after exp.	EN_X/ [neg] EN_X/ [neg] CTRL_X_C/ [pos]	EZX 82 EZX 82 EZX74	+15V / **0V** +15V / **0V** +5V / **0V**
CU_V	stator current phase V dual speed RoCo	EY100 X16 4512 108 09743	9.3A / V additional DC offset of +2.5V	preparation fluoro from 0 rpm braking after exp.	EN_X/ [neg] EN_X/ [neg] CTRL_X_C/ [pos]	EZX 82 EZX 82 EZX74	+15V / **0V** +15V / **0V** +5V / **0V**
CU_W	stator current phase W dual speed RoCo	EY100 X17 4512 108 09743	9.3A / V additional DC offset of +2.5V	preparation fluoro from 0 rpm braking after exp.	EN_X/ [neg] EN_X/ [neg] CTRL_X_C/ [pos]	EZX 82 EZX 82 EZX74	+15V / **0V** +15V / **0V** +5V / **0V**
DR_TV_NG	dose rate signal of TV chain, negative signal	EZX61:8 EZ139 X2:C19	+/- 12V	start of fluoro	EN_X/ [neg] {-1} CTRL_X_C/ [neg] {-1}	EZX82 EZX74	+15V / **0V** +5V / **0V**
DR_TV_PO	dose rate signal of TV chain, positive signal	EZX61:7 EZ139 X2:A19	-/+ 12V	start of fluoro	EN_X/ [neg] {-1} CTRL_X_C/ [neg] {-1}	EZX82 EZX74	+15V / **0V** +5V / **0V**
DS_MC_SG	dose signal ramp of selected measuring chamber / DSI etc.	EZ150 X4 *use 10kHz filter if provided by oscilloscope*	0...+12V	from start to end of exposure	CTRL_X_C/ [neg] {-1}	EZX74	+5V / **0V**
HT_AN	high tension anode side actual value at measuring circuit	EZ130 X1:C17	0...10V = 0...100kV at 10kOhms	exposure / fluoro command	CTRL_X_C/ [neg] {-1}	EZX 74	+5V / **0V**
HT_CA	high tension cathode side actual value at measuring circuit	EZ130 X1:C16	0...-10V = 0...-100kV at 10kOhms	exposure / fluoro command	CTRL_X_C/ [neg] {-1}	EZX 74	+5V / **0V**

signal mnemonic	signal name	signal measuring point(s)	value range of signal	procedure / transition	trigger signal(s) [slope] **neg**ative or **pos**itive {delay /divisions}	trigger signal measuring point(s)	value of trigger signal **bold** = active status
Iu	stator current phase U low speed RoCo	EYA X22 4512 108 0590x	10A / V no signal during braking	preparation	EN_X/ [neg]	EZX82	+15V / **0V**
Iw	stator current phase W low speed RoCo	EYA X22 4512 108 0590x	10A / V	preparation braking after exp.	EN_X/ [neg] CTRL_X_C/ [pos]	EZX82 EZX74	+15V / **0V** +5V / **0V**
SIGN_CH1 against RF_0V_CH1	dose signal of meas. chamber 1 EZX21	EZ150 X1:C7 against EZ150 X1:C8	0...+12V	from start to end of exposure	CTRL_X_C/ [neg] {-1}	EZX74	+5V / **0V**
SIGN_CH2 against RF_0V_CH2	dose signal of meas. chamber 2 EZX22	EZ150 X1:A7 against EZ150 X1:A8	0...+12V	from start to end of exposure	CTRL_X_C/ [neg] {-1}	EZX74	+5V / **0V**
SIGN_CH3 against RF_0V_CH3	dose signal of meas. chamber 3 EZX31	EZ150 X1:C13 against EZ150 X1:C14	0...+12V	from start to end of exposure	CTRL_X_C/ [neg] {-1}	EZX74	+5V / **0V**
SIGN_CH4 against RF_0V_CH4	dose signal of meas. chamber 4 EZX32	EZ150 X1:A13 against EZ150 X1:A14	0...+12V	from start to end of exposure	CTRL_X_C/ [neg] {-1}	EZX74	+5V / **0V**
SIGN_CH5 against RF_0V_CH5	dose signal of meas. chamber 5 EZX41	EZ150 X1:C19 against EZ150 X1:C20	0...+12V	from start to end of exposure	CTRL_X_C/ [neg] {-1}	EZX74	+5V / **0V**
FI_AV_SF	filament current small focus	EZ119 X5 at the front	1V = 2.5A	1st boost at prep 2nd boost at exp request	EN_X_C/ [neg] {-1} CTRL_X/ [neg] {-1}	EZX74 EZX85	+5V / **0V** +15V / **0V**
FI_AV_LF	filament current large focus	EZ119 X7 at the front	1V = 2.5A	1st boost at prep 2nd boost at exp request	EN_X_C/ [neg] {-1} CTRL_X/ [neg] {-1}	EZX74 EZX85	+5V / **0V** +15V / **0V**

Signal bus EZX23 generator signal bus
- - - - - - - - - - at EZ backpanel - - - - - - - - - - - - - - - -

high = +15VDC		high = +5VDC (except CAN)	
X81	RESET_SW/	X71	CAN_L
X82	EN_X/	X72	CAN_H
X83	NR_PR_X/	X73	RESET_C/
X84	RQ_SN_X/	X74	CTRL_X_C/
X85	CTRL_X/	X75	STOP_X_C/
X86	X_ACT/	X76	EN_X_C/
X87	GND	X77	X_ACT_S/